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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,481	11/10/2003	Sonya S. Johnson	112703-306	5154

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EXAMINER	
ROBERTS, LEZAH	

ART UNIT	PAPER NUMBER
1614	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/705,481	JOHNSON ET AL.	
	Examiner	Art Unit	
	Lezah W. Roberts	1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) *2-3, 12-13, 17 and 21-26* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4-11, 14-16, 18-20 and 27-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The office recognizes the election of a chewing gum in the response filed March 3, 2006. Although an election was made, it was not specifically stated the election was made with traverse, therefore, it is concluded the election is made without traverse. The Applicant questions what is and what is not a generic claim. In response to the issue, in regards to claims 11 and 21, the claims are generic to a "cooling agent" and a "heating agent" (emphasis added) as stated in the communication mailed January 25, 2006. The claims are independent claims, which are further limited by defining the cooling agent and the heating agent in the dependent claims, which have been withdrawn from consideration. Although the election of a cooling and heating agent are still required, the examiner has withdrawn the requirement in order to expedite prosecution of the application. Claims 1, 4-11, 14-16, 18-20 and 27-33 will be examined on the merits. Claims 2-3, 12-13 and 17 have been cancelled. Claims 21-26 are withdrawn from further consideration.

Claims

Claim Rejections - 35 USC § 112 - Indefiniteness

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 6, 9, 10, 14, 16, 19, 20, 30, 31, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention. The instant claims are indefinite insofar as the basis for the percent calculation is not set forth, e.g., percent by weight based on the total weight of the composition, percent by volume based on the volume of the carrier, etc. See Honeywell Intl. v. Intl. Trade Commn., 341 F.3d 1332, 1340 (Fed. Cir. 2003). (Holding that where a claimed value varies with its method of measurement and several alternative methods of measurement are available, the claimed value is indefinite unless the particular method of measurement is recited.) The percent calculation must either be clearly defined within the specification or set forth within the claim.

Claim Rejections - 35 USC § 103 - Obviousness

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1) Claims 1, 4-6-11, 14-16, 18-20 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Record et al. (US 5,372,824) in view of Sturtz (US Plant 8,645).

Record et al. teach modified peppermint flavor compositions comprising distilled peppermint, a cooling agent and additional flavorings, which may be incorporated in chewing gum compositions. The peppermint is distilled in order to remove the menthol from the peppermint oil, which reduces the bitterness of the flavor composition. The flavor compositions may also comprise cooling agents, which include menthyl lactate and N-ethyl-p-menthane-3-carboxamide (WS-3). The compositions also comprise peppermint oil that has not been altered. Using the distilled peppermint oil in conjunction with the unmodified peppermint oil reduces the amount of unmodified peppermint oil needed to make a flavorable chewing gum. The cooling agent makes up about 0.03% of the chewing gum formulation when the flavoring is added to make up 1.35% of the composition, which encompasses claims 4 and 14. The flavoring agent of the compositions has a concentration from about 0.9% to 1.35% of the gum composition (Example 3A), which encompasses claims 9, 19 and 30. The modified peppermint flavor made up about 33% of the composition when used in conjunction with natural peppermint flavor (see Flavor No. 6-7). The compositions also comprise ethyl alcohol, which is considered a heating agent (Example 3A)[1], which encompasses the instant claims. The reference differs from the instant claims insofar as it does not teach using Erospicata oil in the flavor compositions.

[1] Bealin-Kelly et al. US 6,280,762, col. 1, lines 8-17.

Sturtz teaches a new mint plant species named Erospicata and has the same organoleptic properties as peppermint oil (col. 2, lines 21-23). The reference teaches Erospicata has a characteristic peppermint taste and smell, yet its oil contains much lower levels of menthol and much higher levels of menthone, less than 1%. The low menthol content of the essential oil is important because menthol is an alcohol that irritates nasal, oral and gastrointestinal epithelium, therefore only very small amounts of conventional peppermint oil can be added to ingestible products such as candy. The menthone content provides a "hot" peppermint taste and odor. The absence of this alcohol helps avoid nasal and gastrointestinal irritation, while the menthone provides peppermint-like organoleptic properties. The mint plant also expresses an oil that is low in carvone and piperitone content. The substantial absence of carvone and piperitone is important because these substances provide a taste that is organoleptically undesirable in peppermint oil. Carvone provides a spearmint taste, while piperitone imparts a bitter taste (col. 2, lines 5-36). The reference differs from the instant claims insofar as it does not teach consumable products comprising a cooling agent, a heating agent or a method of enhancing the flavor of an oral product by adding Erospicata and a cooling agent or heating agent.

It would have been obvious to one of ordinary skill in the art to have used erospicata in place of the distilled peppermint oil in the compositions of the primary reference motivated by the desire to reduce the bitterness of the composition while being able add more flavor without the effects of menthol, save on time by not having to distill the peppermint oil, and to maintain the same organoleptic properties as

peppermint oil, as disclosed by the secondary reference. In regards to claims 27-31, when Erospicata is added to the consumable compositions, it may be added in higher amounts to enhance or add more peppermint flavor without the effects of menthol. In regards to the claims 32-33, it would have been obvious to reduce the amount of peppermint originally used in the gum composition because of the addition of erospicata that can provide similar effects, e.g., flavor and organoleptic effects, without the irritation of extra menthol.

2) Claims 1, 4-10, 27-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima et al. (US 4,645,662) in view of Sturtz (US Plant 8,645).

Nakashima et al. teach oral compositions for preventing and remedying dentinal hypersensitivity. The oral compositions include dentifrices and mouthwash. The compositions may comprise flavorings such as menthol, spearmint oil, eucalyptus oil, eugenol and spice essential oils or spice oleoresin. Menthol is incorporated in order to remove the metallic taste from the compositions. It is incorporated in concentrations ranging from 0.1% to 10%, preferably 0.1% to 6%, which encompasses claim 2. If too much menthol is incorporated into the compositions, the compositions may have an excessive cooling taste. The spice oleoresin is added to the compositions in addition to menthol because they impart a delicate flavor and taste to the composition and makes up 0.0001 to 1% of the composition (col. 8, lines 11-45). This also encompasses claim 2. One mouthwash composition comprises menthol, which is considered a cooling agent; pimento oil, which may be considered a heating agent; and peppermint oil, which

encompasses claim 5. The three ingredients together have a concentration of 1.05% weight of the composition, which encompasses claim 9. Of this concentration, peppermint makes up about 38% of the flavoring components (see example 13), which encompasses claim 10, and about 0.4 % of the product, which encompasses claims 6. The reference differs from the instant claims insofar as it does not disclose using erospicata oil in the oral compositions.

The secondary reference is discussed above. Erospicata oil provides a peppermint taste without containing menthol, therefore it may be concluded the erospicata oil may be used in place of the peppermint oil, which encompasses claim 10. The low menthol content of the essential oil is important because menthol is an alcohol that irritates nasal, oral and gastrointestinal epithelium, therefore only very small amounts of conventional peppermint oil can be added to ingestible products such as candy. The secondary reference differs from the instant claims insofar as it does not teach the erospicata essential oil in a consumable product with a heating or cooling agent.

It would have been obvious to one of ordinary skill in the art to have used the erospicata oil in place of or in addition to the peppermint oil in the compositions of the primary reference motivated by the desire to make an oral consumable product with enhanced flavor without adding too much menthol which would provide and excessive cooling effect and cause excess irritation to the nasal, oral and gastrointestinal epithelium, as disclosed by the secondary reference.

In regards to claims 27-31, when Erospicata is added to the consumable compositions, it may be added in higher amounts to enhance or add more peppermint flavor without the effects of menthol. In regards to the claim 33, it would have been obvious to reduce the amount of peppermint originally used in the gum composition because of the addition of erospicata that can provide similar effects, e.g., flavor and organoleptic effects, without the irritation of extra menthol.

3) Claims 1, 4-5, 7-8, 11, 14-15, 18, 27-29 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strobridge (US 5,015,464) in view of Sturtz (US Plant 8,645).

Strobridge teaches antiplaque chewing gums comprising antiplaque properties, which effective against plaque, but also tastes good. The gum must comprise anti-plaque effective amount of eucalyptol, menthol, methyl salicylate and thymol. Menthol is also considered a cooling agent, which encompasses the instant claims. It also comprises a flavor system consisting either separately or in combination spearmint, peppermint and cinnamon oils (col. 3, lines 19-49). Cinnamon oil comprises cinnamic aldehyde as well as eugenol, two heating agents, which encompasses the instant claims. The reference differs from the instant claims insofar as it does not disclose using erospicata as a flavoring.

The secondary reference is discussed above. Erospicata oil provides a peppermint taste without containing menthol. The low menthol content of the essential

oil is important because menthol is an alcohol that irritates nasal, oral and gastrointestinal epithelium, therefore only very small amounts of conventional peppermint oil can be added to ingestible products such as candy. The secondary reference differs from the instant claims insofar as it does not teach the erospicata essential oil in a consumable product with a heating or cooling agent.

It would have been obvious to one of ordinary skill in the art to have used the erospicata oil in place of or in addition to the peppermint oil in the compositions of the primary reference motivated by the desire to make a flavorable chewing gum without adding too much additional menthol which would provide and excessive cooling effect and cause excess irritation to the nasal, oral and gastrointestinal epithelium, as disclosed by the secondary reference.

In regards to claims 27-29, when Erospicata is added to the consumable compositions, it may be added in higher amounts to enhance or add more peppermint flavor without the effects of menthol. In regards to the claims 32-33, it would have been obvious to reduce the amount of peppermint originally used in the gum composition because of the addition of erospicata that can provide similar effects, e.g., flavor and organoleptic effects, without the irritation of extra menthol.

4) Claims 1, 4-11, 14-16, 18-20 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (US 5,149,521) in view of Sturtz (US Plant 8,645).

Hirose et al. teach oral compositions comprising (A) an easily breakable granule, (B) menthol (a cooling agent) and/or a natural substance containing menthol and (C) a flavoring. The oral compositions disclosed can be used as a dentifrice such as toothpaste, a moistened dentifrice and a liquid dentifrice, a mouth washing agent, a troche, or a chewing gum (col. 5, lines 50-56). The menthol-containing component includes peppermint. The peppermint and menthol are included in composition B wherein peppermint makes up 20% to 50% of component B and menthol makes up 35% to 40% of component B. The B component concentration varies from 0.5% to 0.8% of the oral compositions of the examples. Calculating the final concentration of menthol gives values that encompass claims 4 and 14. Component C may comprise different oleoresins such as ginger oleoresin and pepper oleoresin, both heating agents), which encompasses the instant claims. They have a concentration of about 0.0001 and 0.00001% respectively of the disclosed oral compositions (see Examples). The reference differs from the instant claims insofar as it does not disclose using erospicata as a flavoring in the compositions.

The secondary reference is discussed above. Erospicata oil provides a peppermint taste without containing menthol, therefore it may be concluded the erospicata oil may be used in place of the peppermint oil, which encompasses claim 10. The low menthol content of the essential oil is important because menthol is an alcohol that irritates nasal, oral and gastrointestinal epithelium, therefore only very small amounts of conventional peppermint oil can be added to ingestible products such as candy. The secondary reference differs from the instant claims insofar as it does not

teach the erospicata essential oil in a consumable product with a heating or cooling agent.

It would have been obvious to one of ordinary skill in the art to have used the erospicata oil in place of or in addition to the peppermint oil in the compositions of the primary reference motivated by the desire to make a flavorable oral composition gum without adding too much additional menthol which would provide and excessive cooling effect and cause excess irritation to the nasal, oral and gastrointestinal epithelium, as disclosed by the secondary reference.

In regards to claims 27-31, when Erospicata is added to the consumable compositions, it may be added in higher amounts to enhance or add more peppermint flavor without the effects of menthol. In regards to the claims 32-33, it would have been obvious to reduce the amount of peppermint originally used in the gum composition because of the addition of erospicata that can provide similar effects, e.g., flavor and organoleptic effects, without the irritation of extra menthol.

Claims 1, 4-11, 14-16, 18-20 and 27-33 are rejected.

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lezah W. Roberts whose telephone number is 571-272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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